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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,892	04/15/2004	Etienne de Fontenay	03161.116303	7316

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EXAMINER

WILLIAMS, THOMAS J

ART UNIT PAPER NUMBER

3683

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,892

Applicant(s)

DE FONTENAY ET AL.

Examiner

Thomas J. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 and 13 is/are allowed.
- 6) ☒ Claim(s) 1,4-9,11,12 and 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Acknowledgment is made in the receipt of the oath filed June 28, 2005 and the amendment filed July 21, 2005.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 11 and 12 recite the limitation "said first transverse direction" in line 2. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 4, 5 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,273,406 to Miyamoto et al. in view of US 6,899,323 to Takeshita et al.

Re-claim 1, Miyamoto et al. teach in figure 16 a hydroelastic joint suitable for assembly of ground contact members to a vehicle, the joint comprising: an external reinforcement 117, an internal reinforcement 111, and an assembly forming a hydroelastic joint comprising a first elastically deformable element 115 having at least one sealed volume containing a damping fluid 118, a second elastically deformable element 113 is disposed between the assembly and the internal reinforcement, the second elastic element has a longitudinal dimension less than the first elastic element, thus limiting transverse deformation during relative tilting of the reinforcements, the joint further comprises an intermediate reinforcement element 12 disposed between the first and second elastic elements, the first and second elastic elements adhere to the intermediate reinforcement and the second elastic element adheres to the internal reinforcement, the intermediate reinforcement has a constant cross section at a cylindrical central portion. However, Miyamoto et al. fail to teach the internal reinforcement as also having a constant cross section at a cylindrical central portion thereof, but rather a bulged portion.

Takeshita et al. teach in figures 1 and 6-8 an elastic joint with an internal reinforcement having various design features. Specifically figures 1 and 7-8 teach an internal reinforcement having a constant cross section at a cylinder central portion. This design improves the riding comfort over the reinforcement having a central bulge portion. It would have been obvious to one of ordinary skill in the art to have provided the joint of Miyamoto et al. with an internal

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reinforcement having a constant cross section at a cylindrical central portion thereof as taught by Takeshita et al., thus improving the ride comfort for the occupants in the vehicle.

Re-claim 4, a peripheral reinforcement element 1 16 is disposed in the end walls of the chamber.

Re-claim 5, the assembly is pressed into the external reinforcement.

Re-claim 15, the internal reinforcement 111 is provided with enlarged end sections, see figure 25.

Re-claim 16, flange sections b and c are interpreted as external portions.

Re-claims 17 and 18, it is known in the art to use hydroelastic joints, such as those 1 disclosed by Miyamoto et al., with axles having the recited structure, as noted by the applicant see page 3 paragraphs 6 and 7 of the instant application.

8. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto et al. in view of Takeshita et al. as applied to claim 1 above, and further in view of US 5,516,083 to Sprang et al.

Re-claims 6 and 7, Miyamoto et al. as modified fail to teach the chambers connected by a communication means having one way valve lips. Sprang et al. teaches a hydroelastic joint having a plurality of chambers communicating with each other via a communication path having one way valve lips 8 in addition to normal open communication pathways. These pathways are opened during periods of increased internal pressure within the chambers, thus providing additional fine tuning of the dynamic properties for the spring or hydroelastic joint, see column 3 lines 1-9.

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It would have been obvious to one of ordinary skill in the art to have provided the joint of Miyamoto et al. as modified by Takeshita et al. with communication means having one way valves opening at predetermined pressures between the fluid chambers as taught by Sprang et al., thus increasing the range of damping for the joint.

Re-claims 8 and 9, the joint is provided with two wall sections, that are pre-tensioned and thus act as stop elements, defining the fluid chambers (this is consistent with the instant application, in which the wall section defining the chambers acts as the stop, see figures 1 and 2).

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto et al. in view of Takeshita et al. as applied to claim 1 above, and further in view of US 6,622,996 to Mayerbock et al.

Miyamoto et al. as modified fail to teach the first and second elastically deformable elements being obtained in a single moulding step. Mayerbock et al. teach a hydroelastic joint in which the first and second elastic elements are obtained in a single moulding step, thus saving manufacturing time. It would have been obvious to one of ordinary skill in the art when having manufactured the assembly of Miyamoto et al. to have done so such that the first and second elastic elements would have been obtained in a single moulding step as taught by Mayerbock et al., thus reducing manufacturing time and costs.

Allowable Subject Matter

10. Claims 10 and 13 are allowed.

Response to Arguments

11. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ikeda et al. and Hadano et al. each teach a joint with an internal reinforcement element having a constant cross section at a cylindrical central portion.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is 571-272-7128. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, can be reached at 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-6584.

TJW

September 30, 2005

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Thomas W. W. —
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9-30-05